

BEECH RIDGE ENERGY WIND PROJECT
Habitat Conservation Plan
FINAL ENVIRONMENTAL IMPACT STATEMENT

Appendix A: Table A-1. Alternatives screening analysis for the Beech Ridge Wind Energy Project,
Greenbrier and Nicholas Counties, West Virginia

Table A.1. Alternatives screening analysis for the Beech Ridge Wind Energy Project, Greenbrier and Nicholas Counties, West Virginia.

		Screening Criteria																
		Project Purpose and Need								USFWS Planning		Siting Criteria						
No.	Alternative	100.5 MW of Wind-Generated Electricity	186 MW of Wind-Generated Electricity	Commercially Viable	Local and Regional Electric Supply	Renewable Energy	Fuel Diversity	Air Quality Benefits	Requirement of Court Ruling	Consistent with USFWS Goals	Consistent with the ESA	Technical Feasibility	Resource for Generation Found On-Site	Access to Existing Grid	Access to Existing Roads	Applicant's Siting & Design Preference	Recommended Action	
	Alternatives Retained for Analysis in DEIS																	
1	Alternative 1: No-Action – No ITP / No HCP	Yes	No	U	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	A	Statutorily required.
2	Alternative 2: ITP with Full Implementation of HCP (Proposed Action)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	A	Conservation measures for endangered bat recovery; meets need for issuing ITP.
3	Alternative 3: ITP and HCP to include additional covered species and modified operations	Yes	Yes	U	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	A	Conservation measures for endangered bat and 3 other bats; meets need for issuing ITP.
4	Alternative 4: ITP with Full Implementation of HCP for Phase I Only	Yes	No	U	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	A	Conservation measures for endangered bat recovery; meets need for issuing ITP.
	Alternatives Eliminated from Further Analysis in DEIS																	
5	Full Project Build-Out, Unrestricted Operations, and No ITP/HCP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	X	Poses unmitigated risk to endangered bats; does not meet need for ITP; illegal.
6	ITP with Full Implementation of HCP and Reduced Permit Term	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	X	Has unnecessarily burdensome permitting process with no added protection for endangered bats.
7	Alternative Project Location	Yes	Yes	U	Yes	Yes	Yes	Yes	No	U	U	U	Yes	Yes	Yes	No	X	Proposed location has adequate wind resource; moving project may still put endangered bats at risk in West Virginia or elsewhere within their range.
8	Alternative Energy Sources for Electricity Generation	No	Yes	Yes	Yes	No	No	No	na	U	U	Yes	No	Yes	Yes	No	X	Significant effects to other resources.
	Other Project Configurations at Proposed Location																	
9	Fewer turbines	No	No	U	Yes	Yes	Yes	Yes	na	U	U	Yes	Yes	Yes	Yes	No	X	Fewer turbines still pose a risk to Indiana bats; will not meet generation goal.
10	More turbines	Yes	Yes	Yes	Yes	Yes	Yes	Yes	na	No	No	Yes	Yes	Yes	Yes	No	X	Does not meet USFWS goals for endangered bat protection.
11	Reduced conservation measures for endangered bats	Yes	Yes	Yes	Yes	Yes	Yes	Yes	na	No	No	Yes	Yes	Yes	Yes	Yes	X	Does not meet USFWS goals for endangered bat protection.
	Other Renewable Electric Generation																	
12	Biomass	No	No	No	U	Yes	Yes	Yes	na	Yes	Yes	U	Yes	Yes	Yes	No	X	
13	Fuel cell	No	No	No	U	Yes	Yes	Yes	na	Yes	Yes	U	No	Yes	Yes	No	X	
14	Hydro power	No	No	No	No	Yes	Yes	Yes	na	No	No	No	No	Yes	Yes	No	X	Affects water resources; rivers not suitable for hydropower.
15	Solar	No	No	No	Yes	Yes	Yes	Yes	na	U	U	Yes	Yes	Yes	Yes	No	X	Larger project foot print; will remove more land from forested use; create physical barriers.
16	Wave	No	No	No	No	Yes	Yes	Yes	na	U	U	No	No	Yes	Yes	No	X	Wave energy not a feasible energy source in West Virginia.
17	Tidal	No	No	No	No	Yes	Yes	Yes	na	U	U	No	No	Yes	Yes	No	X	No tidal resources in West Virginia.
	Other Traditional Electric Generation																	
18	Coal	No	Yes	Yes	Yes	No	No	No	na	U	U	Yes	No	Yes	Yes	No	X	Significant effects to other resources.
19	Gas	No	Yes	Yes	Yes	No	No	No	na	U	U	Yes	No	Yes	Yes	No	X	Significant effects to other resources.
20	Nuclear	No	Yes	Yes	Yes	No	Yes	Yes		Yes	Yes	Yes	No	Yes	Yes	No	X	Generates waste that creates storage problems.
21	Oil	No	Yes	Yes	Yes	No	No	No		U	U	Yes	No	Yes	Yes	No	X	Significant effects to other resources.
22	Improvements to existing electric generation	No	No	U	Yes	No	No	Yes		Yes	Yes	Yes	No	Yes	Yes	No	X	Improvements in existing energy production would not replace all benefits provided by wind generation

Ranking Legend

Project Purpose and Need

- Yes = Meets stated purpose and need
- No = Does not meet stated purpose and need
- U = Uncertain if meets stated Project purpose and need

Recommended Action

- A = Alternative retained for detailed analysis
- X = Alternative dropped from consideration

USFWS Planning Goals

- Yes = Meets USFWS's stated planning goals
- No = Does not meet USFWS's stated planning goals
- U = Uncertain if meets USFWS's stated planning goals

Siting Criteria

- Yes = Meets project siting criteria
- No = Does not meet project siting criteria
- U = Uncertain if meets project siting criteria